

BROAD EXAMINATIONS®

P.6 MATHEMATICS EXAMINATION

END OF TERM II 2024

Time allowed: 2 hours 30 minutes

Pupil's Name:

School Name:

District Name:

Read the following instructions carefully:

1. This paper is made up of two sections: **A** and **B**.
2. Section **A** has **20** questions (**40 Marks**)
3. Section **B** has **12** questions (**60 Marks**)
4. Answer **ALL** questions in both sections **A** and **B**.
5. All answers must be written in the space provided in blue or black ball point pens and ink. **Only diagrams should be done in pencil.**
6. Unnecessary crossing of answers will lead to loss of marks.
7. Any handwriting, which cannot be easily read, may lead to loss of marks.
8. Do **not** fill anything in the boxes indicated for Examiners' use only.

FOR EXAMINERS' USE ONLY

| PAGES | MARKS | SIGN |
|--------------|-------|------|
| Page 2 | | |
| Page 3 | | |
| Page 4 | | |
| Page 5 | | |
| Page 6 | | |
| Page 7 | | |
| Page 8 | | |
| TOTAL | | |

Teacher's comment to the learner

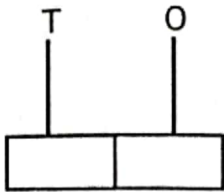
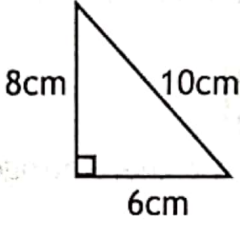
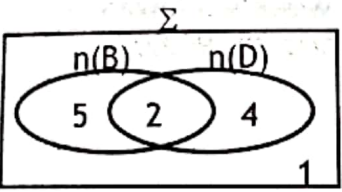

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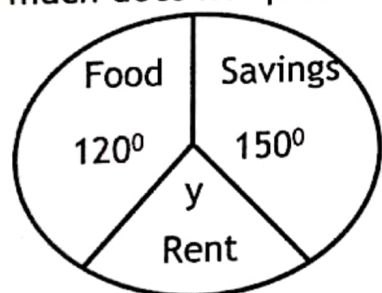
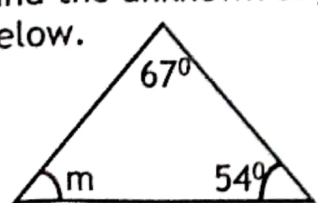
Approved by:



Team Head Mathematics Dept.

SECTION .A. (40 MARKS)

| | | | |
|----|---|-----|---|
| 1. | Subtract: $\begin{array}{r} 6 \quad 7 \\ - 1 \quad 2 \\ \hline \end{array}$ | 2. | Show 43 on the abacus below.  |
| 3. | Work out: $\frac{2}{5} + \frac{1}{5}$ | 4. | Calculate the area of the figure below.  |
| 5. | Study the venn diagram below and use it to answer question 5.  Find $n(B \cup D)$. | 6. | Draw an angle of 80° in the space below using a protractor.  |
| 7. | Express 10:45am to 24hour clock system. | 8. | Solve: $r + 2r = 12$ |
| 9. | What is the highest number of boys who can share either 12 mangoes or 16 mangoes without leaving any mango? | 10. | Which integer is 4 steps to the left of $+1$? |

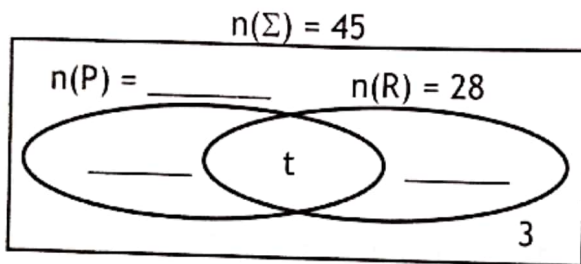
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|-----|---|-----|---|
| 11. | US \$ 1 = Ush. 3700, how many US dollars can one get from Ush. 1,850,000? | 12. | Find the square of 14. |
| 13. | <p>Upper Primary pupils at Buhumba P/S were counted and recorded as shown below.</p>  <p>How many pupils are there altogether?</p> | 14. | Given that set $Q = \{\text{first five whole numbers}\}$. List all the elements of set Q . |
| 15. | <p>The pie-chart below shows how Mr. Richard spends his weekly allowances. How much does he spend on food if he gets allowances worth sh. 90,000?</p>  | | |
| 16. | <p>Subtract:</p> $\begin{array}{r} 201_{\text{five}} \\ - 111_{\text{five}} \\ \hline \end{array}$ | 17. | Find the range of $-2, +3, 0, +1$ and -4 |
| 18. | <p>Find the unknown angle in the figure below.</p>  | 19. | Four rulers cost sh.6000. Find the cost of 5 similar rulers. |

20. Daudi deposited sh.120,000 in a bank that offers an interest rate of 2% per annum for $1\frac{1}{2}$ years. Find the simple interest he got after that time.

SECTION .B. (60 Marks)

21. In a group of 45 pupils, 14 pupils like Posho (P) only, 23 pupils like Rice (R) only, t pupils like both types of food while 3 like neither of the two types of food.

- (a) Represent the above information on the venn diagram below.

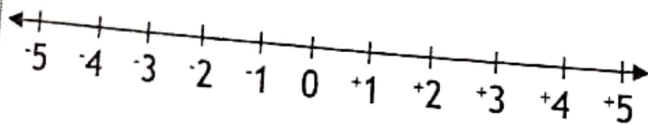


- (b) Find the value of t .

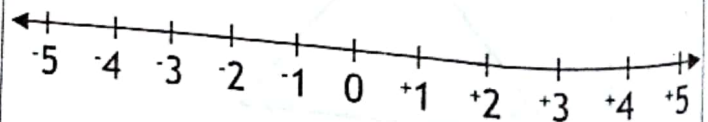
- c) How many pupils do not like posho at all?

Work out the following using a number line;

$+4 + 6$



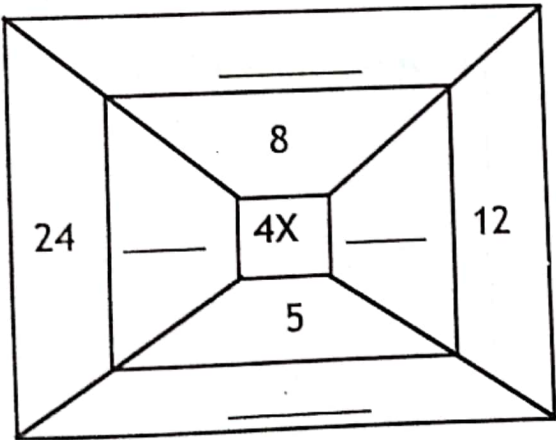
- (b) $-3 - +4$



(04 marks)

| | | | |
|------------|--|-----|--|
| 23. (a) | Given the digits 7, 0 and 5 Write all the 3-digit numerals that can be formed using the digits above. | (b) | Find the difference between the largest and the smallest odd numbers formed. |
| (04 marks) | | | |

| | | | |
|------------|---|-----|--|
| 24. (a) | In a class, 40% are boys and the rest are girls. Find the percentage of girls. | (b) | If there are 20 boys in the class, how many pupils are in the class? |
| (05 marks) | | | |

| | |
|---|---|
| 25. | Complete the number puzzle below carefully. |
|  | |
| (04 marks) | |

| | | | |
|------------|--|-----|---|
| 26. | (a) Dickens was facing North. He turned clockwise through an angle of 135° . What is his new direction? | (b) | Through which angle does one turn anticlockwise from Southeast to West? |
| (05 marks) | | | |

27. (a) Given that $F_{60} = \{2_1, 2_2, x_1, 5_1\}$ and $F_Y = \{2_1, 3_1, 3_2, 3_3\}$. Find the value of;

| | |
|-------|--------|
| (i) x | (ii) Y |
| | |

(b) Find the GCF of 60 and Y using the above factors.

(06 marks)

28. The table below shows marks scored by pupils in End of term test.

| | | | | |
|---------------|----|----|----|----|
| Marks | 60 | 95 | 55 | 80 |
| No. of pupils | — | 1 | 4 | 3 |

| | |
|---|---------------------------|
| (a) If 10 pupils did the test, how many pupils scored 60 marks? | (b) Find the modal score. |
| | |

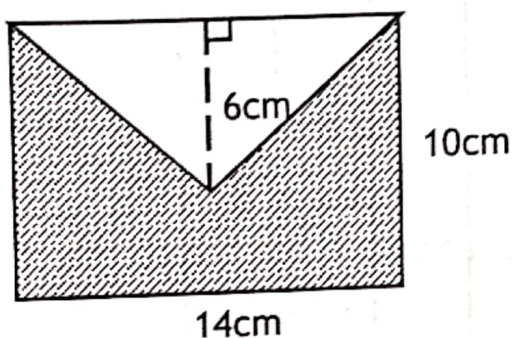
(c) Calculate the average score.

(06 marks)

| | | |
|-----|--|--|
| 29. | <p>(a) Find the missing value in the box below.</p> <p><input type="text"/> $\times 4 = 28$</p> | <p>(b) A man is three times as old as his son. The difference between their ages is 30 years, how old is each?</p> |
|-----|--|--|

(05 marks)

| | |
|-----|---|
| 30. | <p>The figure below shows a triangle inscribed in a rectangle. Study it and answer the questions that follow.</p> |
|-----|---|



| | | |
|-----|--------------------------------|--|
| (a) | Find the area of the triangle. | <p>(b) Work out the area of the shaded part.</p> |
|-----|--------------------------------|--|

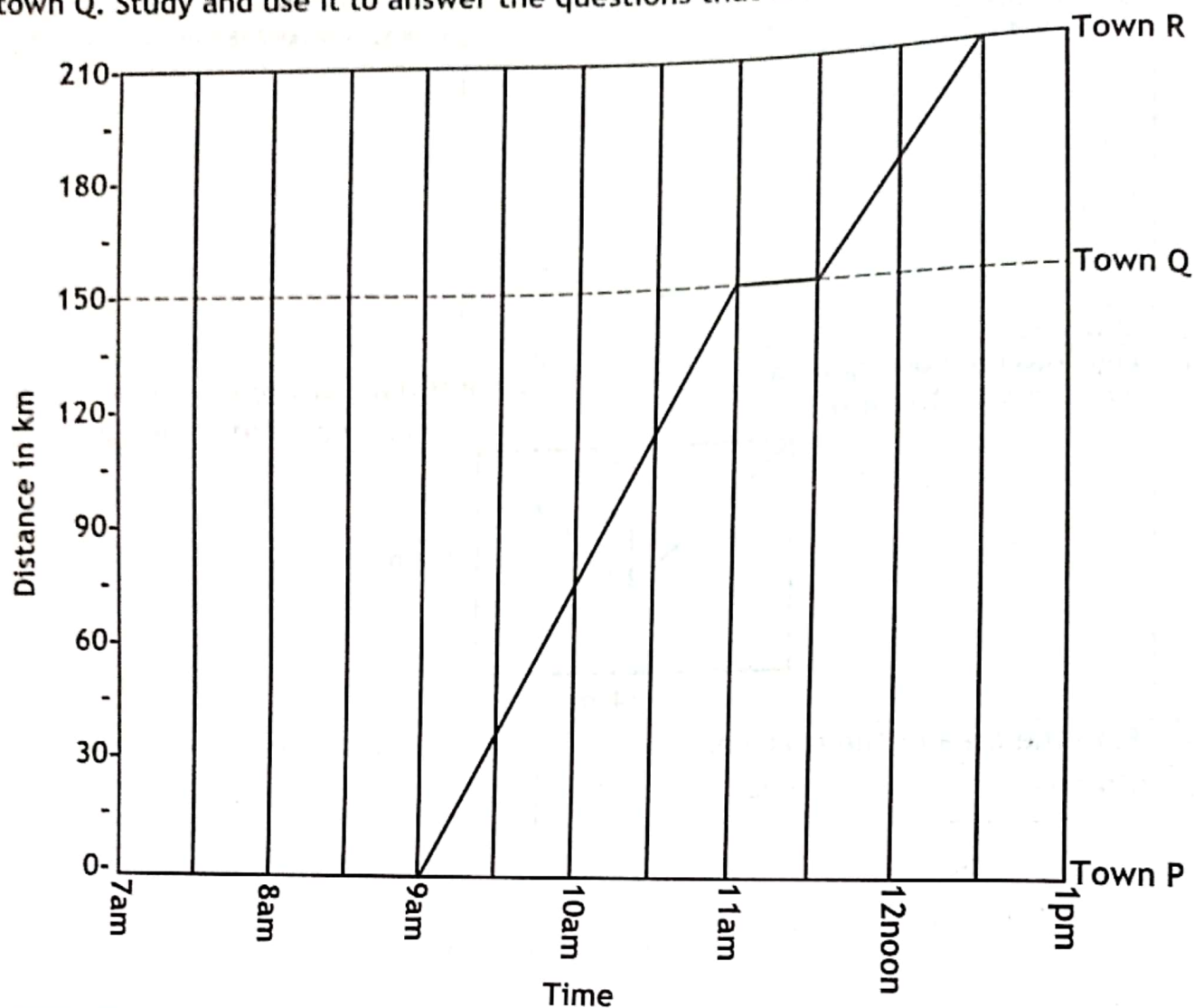
(06 marks)

| | |
|-----|--|
| 31. | <p>A bank cashier received a bundle sh.5000 note numbered consecutively from DH2650321 to DH2650420.</p> |
|-----|--|

| | | |
|-----|---|---|
| (a) | How many shilling notes did he receive? | <p>(b) How much money did he receive?</p> |
|-----|---|---|

(04 marks)

32. The travel graph below shows the journey of a lorry from town P to town Q. Study and use it to answer the questions that follow.



- | | |
|--|--|
| (a) At what time did the lorry reach town R? | (b) For how long did the lorry rest at town Q? |
| (c) Calculate the lorry's average speed for the whole journey. | (d) How far is town R from town Q? |

END

(05 marks)